

(12) APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Office



(43) International publication date
18 November 2004 (18.11.2004)

PCT

(10) International Publication No.
WO 2004/100244 A1

(51) International Patent Classification⁷: H01L 21/306

(21) International Application No.:
PCT/EP/2004/00835

(22) International filing date:
22 April 2004 (22.04.2004)

(25) Language of submission: German

(26) Language of publication: German

(30) Priority data:
103 202 212.9 7 May 2003 (07.05.2003) DE

(71) Applicant(s) (for all designated countries except the
US): UNIVERSITÄT KONSTANZ [DE/DE];
Universitätsstrasse 10, 78464 Konstanz (DE).

(72) Inventor(s); and

(75) Inventor(s)/applicant(s) (US only): HAUSER,
Alexander [DE/DE]; Eichhornstrasse 21, 78464

Konstanz (DE). MELNYK, Ihor [UA/UA]; Knjahyni-
Olhy-Strasse 63/71, Lwiw 79053 USA). FATH, Peter
[DE/DE]; Brandesstrasse 7, 78464 Konstanz (DE).

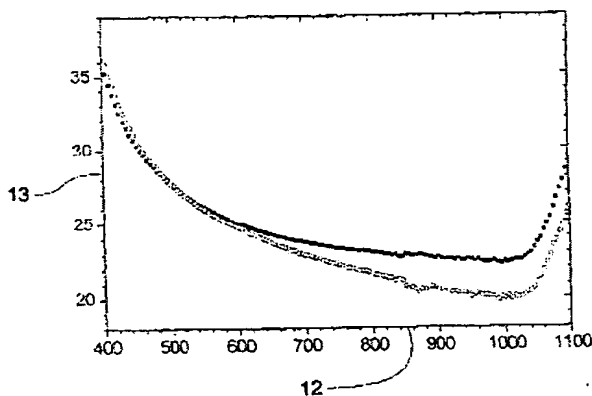
(74) Agent: RACKETTE PARTNERSCHAFT
PATENTANWÄLTE; Kaiser-Joseph-Strasse 179,
Postfach 13 10, 79013 Freiburg (DE).

(81) Designated countries (unless otherwise stated, for each
available type of national protective right): AE, AG,
AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ,
CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE,
EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN,
IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,
LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,
SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US,
UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated countries (unless otherwise stated, for
each available type of regional protective right):

[Continued on next page]

(54) Title: METHOD FOR TEXTURING SURFACES OF SILICON WAFERS



(57) **Abstract:** In a method for texturing surfaces of silicon wafers comprising the steps of dipping the silicon wafers in an etching solution of water, concentrated hydrofluoric acid and concentrated nitric acid and setting a temperature for the etching solution, it is provided that the etching solution comprises, in percent, 20% to 55% water, 10% to 40% concentrated hydrofluoric acid and 20% to 60% concentrated nitric acid and that the temperature of the etching solution is between 0 and 15 degrees Celsius. This results in a comparatively higher efficiency due to reduced reflection by the silicon wafers.



ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK TR), OPAI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

— before the expiration of the time period allotted for amending the claims; publication will be repeated if any changes are made.

For an explanation of the two-letter codes and other abbreviations, see the notes ("Guidance Notes on Codes and Abbreviations") provided at the beginning of each regular edition of the PCT Gazette.